

Do we need a new code of conduct for scientists?

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It is possible to talk about codes of ethics or conduct from a purely normative point of view, and try to establish, from reasoning and moral principles, a list of appropriate and inappropriate behavior that people should abide. It is also possible to look at it from a sociological point of view, and ask why such codes emerge, and the roles they perform. As a social scientist, I prefer the second approach, which leads to a better conceptual and empirical basis, on which moral concerns can be grounded.

The Center for Study of Ethics in the Professions, at the Illinois Institute for Technology, has a collection of over 850 codes of professional ethics available on the Internet, limited to English language sources.² This proliferation suggests that, first, codes of ethics or conduct are considered something necessary and important; and, second, that there is no clear consensus on what this code should be like – if there were, one simple code for all would be enough.

Codes of ethics are essential to the learned professions, to sustain their claim that they should be responsible for their own standards, and controlled for within, rather than being controlled by external clients or supporters. This autonomy and authority is based on trust, and can only be maintained if there is an agreement, within and outside the profession, that the professionals are working for the common good, rather than for their own private benefit. They are also functional for the internal work of the professional communities. According to one author, “modern professions adopted his innovation,

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² Center for the Study of Ethics in the Professions and Illinois Institute of Technology, Code of Ethics on line (2003 [cited November 16 2003]); available from [http://www.iit.edu/departments/csep/PublicWWW/codes/..](http://www.iit.edu/departments/csep/PublicWWW/codes/)

codes of ethics, because they needed its fundamental elements: a) common standards (to support extensive cooperative endeavors); b) the minimization of the interpersonal strife that the emphasis on individual honor encourages; and c) a framework of wills that permits professionals to assert their independence of their nominal employers in the name of service to others.”³

Traditionally, scientists have argued that they are guided by two values, the advancement of knowledge and the advancement of mankind. From modern times, these two values were assumed to be in harmony. In the 1930s and 1940s, two main strains of thought have followed from these assumptions. One, made famous by the work of Robert K. Merton, is that science should remain independent and self-regulated, avoiding the temptations of politics or markets. The other, made famous by J. D. Bernal and his followers, was that scientists, because of their superior knowledge and competence, should get involved in politics and in the economy, to make rationality to prevail.⁴

In spite of their bitter opposition, the two visions shared the notion that scientists belonged to a well identified profession, defined by their unconditional commitment to the search for truth through the use of reason and rational investigation. This simple vision was shattered, in recent years, by two developments. The first was the end of the modern belief on the inherent goodness of the advancement of knowledge and technology⁵. The second was the breakdown of the dividing lines between science, technology, engineering, government, industry, business, and education.⁶

It is difficult to argue, in this situation, that there is still a unified scientific profession (if it ever existed), with a common set of values. It is hard to sustain that the scientific norms listed by Merton half a century ago – universalism, organized

³ Robert Denio Baker, "Codes of ethics: some history," *Perspectives on the Professions* 19 (Fall, 1999).

⁴ J D.. Bernal, *The social function of science*, The M.I.T. Press paperback (Cambridge, 1967), Robert King Merton, *The sociology of science - theoretical and empirical investigations* (Chicago, 1973).

⁵ Bruno Latour, *We have never been modern* (Cambridge, Mass, 1993).

⁶ Michael Gibbons et al., *The new production of knowledge - the dynamics of science and research in contemporary societies* (London, Thousand Oaks, California, 1994).

skepticism, disinterestedness and communism (open communication and common ownership of knowledge) still prevail. After Stalinism, there is little left of Bernalism. And yet, the powers of science, for good or bad, are much stronger today than in those years.

This is perhaps the explanation for the paradox mentioned at the beginning – intensive efforts to develop new codes of conduct for scientists, and a lack of clarity of what these codes should contain or to be like. Scientists feel the need because they feel they are losing their autonomy and intellectual independence; society feels the need because it does not trust the scientists anymore, and want to know exactly what is being done, at what price, and with what consequences.

The new codes of conduct, therefore, should be the product of difficult negotiations between scientists and society, to recover, if possible, the old relationship of trust, without which science cannot develop and be made useful. They cannot be written by the scientists alone, and cannot be imposed on them from outside. They should be specific to different areas of activity, but it is not impossible to list some of their central features. Modern codes of conduct should add, to Merton's list, the values of social accountability and responsibility for the consequences of research. Disinterestedness and communism are difficult values to hold, in this era of proprietary knowledge and science and technology as business; universalism and organized skepticism remain as important today as in the past.

Finally, the codes of conduct for science and technology should not be applied only to professional scientists, but to the institutions, public and private, that deal with knowledge and their applications. And they should not be enforced only from within the professions, as in the past, but also from outside, through well defined legislation, oversight bodies, and the judiciary.

It is a much more complicated world, likely to create problems for the development of scientific work, and place undesirable limits to the use of scientific advancements for the common good. These difficulties, however, are unavoidable, and can only subside as new relations of trust between science, technology and society are created and established.

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